

WHAT IS CLAIMED IS:

1. An inflation and deflation apparatus, comprising:
  - (a) an air channel, wherein said air channel comprises an air channel bore;
  - (b) a compressed air inlet in communication with said air channel;
  - (c) an air chamber rotatably connected to said air channel, wherein said air chamber comprises an air chamber bore and an air chamber passage, and wherein said air chamber is operable to rotate such that said compressed air inlet and said air chamber passage are in alignment whereby compressed air may pass from said compressed air inlet through said air chamber passage; and
  - (d) a cap assembly attached to said chamber, wherein said cap is operable to selectively open and close an air outlet from said air chamber passage through said air chamber bore.
2. The apparatus of claim 1, further comprising a diffuser attached to said chamber and engaged with said cap, wherein said cap is operable to selectively open and close said diffuser and thereby open said air outlet whereby air may flow from said air passage through said chamber.
3. The apparatus of claim 2, wherein said diffuser comprises a plurality of vents spaced at intervals around the surface of said diffuser and extending radially outward from the longitudinal axis of said diffuser.

4. The apparatus of claim 3, wherein said cap is threadably engaged with said diffuser, and said cap is rotatably operable to selectively open and close said vents of said diffuser.
5. The apparatus of claim 2, further comprising a venturi tube within said chamber bore.
6. The apparatus of claim 5, further comprising a valve connector assembly attached to said air channel, wherein said valve connector assembly is operable to releaseably engage a valve.
7. The apparatus of claim 5, wherein said venturi tube comprises a frustoconical bore.
8. The apparatus of claim 7, further comprising at least one venturi tube inlet passing through said venturi tube and allowing air to flow between said air inlet and said venturi tube bore.
9. The apparatus of claim 8, further comprising a volumizer between said venturi tube and said diffuser and within said chamber bore.
10. The apparatus of claim 6, further comprising an air inlet connector in communication with said air inlet, wherein said air inlet connector is adapted to receive an air hose.
11. The apparatus of claim 10, further comprising a coupling fitted telescopically within said air inlet connector, wherein said coupling is resiliently biased against said chamber in alignment with said air passage.
12. The apparatus of claim 11, wherein said coupling comprises a top end and a bottom end, and wherein said apparatus further comprises a coupling top o-

ring annularly attached near said top end of said coupling and circumscribing said coupling, and said bottom o-ring is annularly attached at said bottom end of said coupling such that said bottom o-ring is in resilient contact with said chamber in alignment with said air passage.

13. The apparatus of claim 11, further comprising a spring within said air inlet connector, said spring biasing said coupling away from said air inlet connector and toward said chamber.

14. An inflation and deflation apparatus, comprising:

- (a) an elongated barrel comprising an open barrel bore;
- (b) an elongated handle comprising an open handle bore and a handle air passage extending radially through said handle and connecting to said handle bore; and
- (c) a housing connected to said barrel and circumscribing at least a portion of said handle, wherein said housing comprises a housing air inlet extending radially through said housing, and wherein said handle is operable to rotate with respect to said barrel housing such that said air inlet is in alignment with said air passage to allow compressed air to pass through said air inlet into said handle bore.

15. The apparatus of claim 14, further comprising a diffuser attached to said handle, wherein said diffuser comprises at least one air passage whereby air may escape from said handle bore.

16. The apparatus of claim 16, further comprising a cap operable to open and close said air passage.

17. The apparatus of claim 16, wherein said air passage comprises a plurality of vents spaced along said diffuser, and wherein said cap is threadably engaged with said diffuser.

18. The apparatus of claim 16, further comprising a frustoconical tube within said handle, wherein said frustoconical tube comprises a base and an apex, and said frustoconical tube comprises at least one air opening to allow air to pass from said air passage through said frustoconical tube, wherein said barrel bore is in pneumatic communication with said base of said frustoconical tube, and wherein said diffuser is in pneumatic communication with said apex of said frustoconical tube.

19. The apparatus of claim 18, further comprising a volumizer positioned between said frustoconical tube and said diffuser, and wherein said volumizer is in pneumatic communication with said apex of said frustoconical tube and said diffuser.

20. The apparatus of claim 16, further comprising a valve connector attached to said barrel and in pneumatic communication with said barrel bore, wherein said valve connector comprises releasable means to engage a valve.